Rank, company ('82 rank)	Sales Growth 1978–82 Percent increase	Compound annual rate	'82 sales ($000)	'78 sales ($000)	Profit range * '82	'78	No. of employees '82	'78	Acquisitions '78-'82	Date founded	Business description
166. Gemini Laminating (Beverly, MA)	1,040	84	6,063	532	C	F	95	25	0	1978	Flame & adhesive lamination
167. American Agrisurance (Council Bluffs, IA)	1,040	84	23,074	2,025	D	D	29	5	0	1977	Crop insurance sales
168. Technology Constructors (Denver, CO)	1,038	84	1,145	101	D	A	20	3	0	1978	General contractor
169. Memphis Glove (77) (Memphis, TN)	1,030	83	14,092	1,247	D	D	28	4	0	1974	Distributes work gloves
170. Audio Command Systems (Rockville Ctr., NY)	1,025	83	1,683	150	A	E	25	4	0	1978	Mfr. audio/visual systems
171. CTEC (Sacramento, CA)	1,021	83	4,622	412	D	C	97	5	0	1976	Mfr. chair lifts
172. Transalaska Data Sys. (152) (Anchorage, AK)	1,020	83	5,566	497	D	D	37	9	0	1973	Micros & datacommunications equip.
173. Weekley Homes (Houston, TX)	1,020	83	44,290	3,953	C	D	79	11	0	1976	Residential construction
174. National Business Communic. (68) (Pompano Beach, FL)	1,014	83	5,677	510	D	E	60	2	2	1975	Business telephone systems
175. Sun Hill Industries (29) (Stamford, CT)	1,013	83	7,144	642	A	A	38	5	0	1974	Mfr. holiday & stationery supplies
176. Advanced Technology (34) (McLean, VA)	1,012	83	41,764	3,756	D	C	920	140	0	1976	High-tech services
177. D & D Services (134) (Phenix City, AL)	1,006	82	2,592	234	D	C	275	45	0	1975	Service contractor
178. Dilithium Press (Beaverton, OR)	1,005	82	2,705	245	C	F	28	3	0	1976	Publish microcomputer books, software
179. NEOPC (176) (Leominster, MA)	997	82	5,486	500	C	D	25	4	0	1977	Natural foods distributor
180. Crisstad Enterprises (LaGrande, OR)	995	82	5,583	510	A	C	21	11	0	1974	Sales of logs & wood products
181. Financial Associates (Prairie Village, KS)	995	82	6,855	626	A	A	21	2	0	1976	Health insurance
182. TABS Associates (Baltimore, MD)	989	82	4,641	426	C	A	356	41	0	1977	Presort mail service
183. Ugly Duckling Rent-A-Car Sys. (Tucson, AZ)	984	81	16,500	1,522	E	E	11	2	0	1978	Used rental car franchising
184. Viar (Alexandria, VA)	984	81	4,416	407	D	C	46	11	0	1976	Computer software sys. devel.
185. JBF Associates (Knoxville, TN)	984	81	1,192	110	B	D	23	6	0	1977	Engineering consulting
186. RAIL (Towson, MD)	977	81	10,093	937	D	D	108	25	0	1970	Engineering & analytical serv.
187. Sky Courier Network (Reston, VA)	970	81	32,000	2,991	D	D	284	60	2	1977	Time-critical air courier service
188. Bank Earnings (69) (Atlanta, GA)	947	80	5,049	482	A	A	47	8	2	1976	Financial services
189. One Pass (211) (San Francisco, CA)	944	80	5,200	498	C	E	50	8	4	1977	Video productions
190. Illuminations (Cambridge, MA)	941	80	4,005	385	D	C	72	10	0	1973	Stationery, stickers & gift products
191. Microtech Mfg. (40) (Minneapolis, MN)	941	80	12,873	1,237	F	B	250	30	2	1973	Job shop, metal manufacturing
192. Robelle Industries (Stoughton, MA)	937	79	7,200	695	D	D	37	2	3	1976	Retail & truck leasing
193. National Health Care Affiliates (Buffalo, NY)	932	79	4,446	431	D	F	807	48	8	1977	Manages health-care facilities
194. Polaris Vac-Sweep (24) (San Marcos, CA)	930	79	13,972	1,356	C	A	87	17	0	1957	Automatic swimming-pool cleaners
195. Branson Aircraft (181) (Denver, CO)	929	79	3,190	310	A	A	75	12	0	1966	Mfr. custom aircraft equipment
196. World Wide Chemicals (41) (Indianapolis, IN)	920	79	3,183	312	D*	F	26	7	0	1977	Automotive reconditioning chemicals
197. United Design (Noble, OK)	917	79	1,387	136	C	A	65	7	0	1975	Mfr. giftware products
198. Mini-Pak (23) (New York, NY)	912	78	4,017	397	B	D	42	8	0	1976	Broadcast & advertising software sys.
199. Indiana Records Managers (Indianapolis, IN)	910	78	4,143	410	D	D	27	5	1	1976	Retail office equipment
200. Ashcraft Trucking (79) (Shelbyville, IN)	904	76	5,087	507	D	C	100	20	0	1970	Freight transportation

* INC. estimate. A: 16% or more. B: 11% to 15%. C: 6% to 10%. D: 1% to 5%. E: Breakeven. F: Loss.

Rank, company ('82 rank)	Sales Growth 1978–82 Percent increase	Compound annual rate	'82 sales ($000)	'78 sales ($000)	Profit range* '82	'78	No. of employees '82	'78	Acquisitions '78-'82	Date founded	Business description
201. Interphase (Dallas, TX)	900	78	2,378	238	A	A	25	5	0	1974	Mfr. micro peripheral controllers
202. Environ Enterprises (Cincinnati, OH)	886	77	2,683	272	D	D	30	3	0	1977	General contractors
203. Flight International Group (60) (Atlanta, GA)	884	77	13,805	1,402	C	A	150	18	2	1976	Aviation services
204. Cormed (187) (Medina, NY)	879	77	2,014	206	C	D	12	1	0	1976	Mfr./dist. medical devices
205. Photogenesis (San Antonio, TX)	877	77	7,230	740	D	E	37	20	0	1973	Operate retail camera stores
206. Jewell Building Systems (175) (Dallas, NC)	875	77	2,702	277	F	D	32	5	0	1977	Mfr. metal prefab buildings
207. Essex Grain Products (King of Prussia, PA)	874	77	17,980	1,846	D	D	45	6	2	1972	Dist. food ingredients
208. Trade West (Honolulu, HI)	870	76	1,287	133	F	F	12	7	0	1978	Dist. gifts & souvenirs
209. Pied Piper Industries (Cleveland, OH)	868	76	2,606	269	D	B	15	5	0	1972	Electr. bug killers, car secur. sys.
210. Qualimetrics (Highlands, CA)	863	76	7,449	774	C	F	71	9	1	1977	Mfr. geophysical intruments
211. Pelican Products (Torrance, CA)	863	76	1,074	112	B	D	7	1	0	1976	Mfr. scuba & camera accessories
212. Wizard Publications (Torrance, CA)	860	76	1,804	188	D	D	14	6	0	1976	Magazine publisher
213. Jack Young Associates (St. Albans, NY)	851	76	5,489	577	D	F	160	2	0	1961	Mfr. sweaters
214. Uniq Digital Technologies (128) (Batavia, IL)	849	76	3,838	404	C	C	45	12	0	1975	Office systems development
215. RSR Wholesale Guns (Orlando, FL)	843	75	20,652	2,191	D	D	48	5	0	1977	Wholesale guns
216. Metro Information Serv. (105) (Virginia Beach, VA)	839	75	1,101	117	B	C	41	1	0	1973	Computer software serv. & products
217. Willis (51) (Houston, TX)	838	75	21,480	2,290	D	D	120	16	2	1976	Personnel services
218. Telco Research (Nashville, TN)	837	75	2,268	242	A	E	39	4	0	1977	Telecomm. software & consulting
219. RT Cable (Orange, NJ)	834	75	9,561	1,023	D	D	100	20	0	1972	Cable TV installation
220. Sport Graphics (Cranston, RI)	833	75	2,800	300	C	D	50	30	0	1977	Mfr./dist. sport bags
221. American Technical Serv. (130) (Tucker, GA)	824	74	19,243	2,082	D	C	300	60	1	1975	Instrument control systems
222. Intertrade Industries (Huntington Beach, CA)	819	74	1,424	155	B	D	34	7	1	1975	Mfr. marine equipment
223. Signal Technology (Goleta, CA)	817	74	2,541	277	D	D	18	4	0	1977	Software development & sales
224. Nutech (184) (San Jose, CA)	817	74	59,600	6,500	B	C	625	108	1	1974	Engineering services
225. Alimar et Cie (Scottsdale, AZ)	817	74	1,100	120	B	C	2	2	0	1977	Wine importer
226. Protec Management Systems (Lafayette, CA)	810	74	931	102	A	B	16	3	0	1977	Security & mgmt. control systems
227. Florida Food Industries (4) (Winter Park, FL)	806	74	8,796	970	B	C	347	51	0	1977	Restaurant franchisee
228. A. J. Reynolds (Torrance, CA)	806	74	1,401	155	D	F	10	5	0	1977	Dist. industrial products
229. Hillside Bedding (Mount Vernon, NY)	805	73	19,000	2,100	C	C	58	9	0	1973	Retail bedding stores
230. Cooper Consultants (Portland, OR)	803	73	2,329	258	C	D	45	13	0	1976	Construction design & mgmt. services
231. Tool King (Denver, CO)	802	73	4,699	521	E	E	47	8	0	1978	Retail hardware stores
232. Eagle Security Systems (Aurora, CO)	801	73	2,108	234	F	F	297	40	0	1977	Security services
233. Betac (Arlington, VA)	800	73	9,000	1,000	D	C	139	32	0	1977	Systems engineering
234. Cosain (Johnson City, NY)	793	73	5,746	643	E	F	6	2	2	1978	Dist. N.Y. State lottery tickets
235. Graham Brake & Diesel (62) (Chatsworth, CA)	792	73	6,100	684	D	D	31	5	1	1977	Dist. bus & diesel parts

* INC. estimate. A: 16% or more; B: 11% to 15%; C: 6% to 10%; D: 1% to 5%; E: Breakeven; F: Loss

Rank, company ('82 rank)	Sales Growth 1978–82 Percent increase	Compound annual rate	'82 sales ($000)	'78 sales ($000)	Profit range* '82	'78	No. of employees '82	'78	Acquisitions '78-'82	Date founded	Business description
236. Allegro Services (195) (Tucker, GA)	791	73	8,206	921	D	D	87	20	0	1975	Dist. fund-raising merchandise
237. Attridge Heating & Cooling (210) (Tempe, AZ)	788	73	1,522	171	D	C	14	5	0	1975	Mfr. evaporative cooling sys.
238. Saturn Electric (San Diego, CA)	773	72	2,244	257	D	A	30	4	0	1963	Electrical constr. contractor
239. Wheeled Coach (Winter Park, FL)	771	72	21,837	2,506	D	D	220	27	0	1976	Mfr. ambulances
240. Cornell Computer (New York, NY)	764	71	10,707	1,239	D	D	175	25	0	1972	Computer consulting
241. Clock Stoppers (San Rafael, CA)	763	71	943	109	D	F	30	4	0	1977	Portrait photography
242. Bio-Analytics (Palm City, FL)	757	71	883	103	C	F	21	6	0	1971	Mfr. medical equipment
243. Administrative Information Sys. (Bridgewater, NJ)	756	71	1,073	125	A	F	8	2	0	1977	Medical software & hardware sys.
244. Seko Air Freight (99) (Schiller Park, IL)	753	71	11,310	1,326	D	D	54	15	0	1976	Air freight
245. Executone Telecommunications (Reading, PA)	751	71	2,418	284	D	F	31	6	1	1945	Telephone equipment sales
246. Kirke–Van Orsdel (53) (Des Moines, IA)	749	71	15,939	1,877	D	F	352	76	4	1974	Insurance broker/administrator
247. Deerfield Communications (New York, NY)	744	70	38,000	4,500	A	A	15	6	0	1974	Asset management barter
248. PCI Energy Services (Lake Bluff, IL)	744	70	8,143	965	B	A	125	8	0	1971	Nuclear power plant maintenance
249. ACSIS (56) (New York, NY)	736	70	4,181	500	D	C	100	40	0	1975	Computer consultants
250. Houston Wire & Cable (Houston, TX)	736	70	61,606	7,370	D	D	135	40	0	1975	Dist. electrical wire & cable
251. Computer Maintenance (Secaucus, NJ)	731	70	3,495	421	D	C	31	5	0	1977	Service computers, sell peripherals
252. TeleCheck Texas (52) (Houston, TX)	726	70	4,960	600	C	F	111	24	0	1977	Check & credit authorization
253. Windham (230) (Pensacola, FL)	722	69	37,000	4,500	A	A	35	15	20	1973	Owner/operator real estate
254. New England Soy Dairy (Greenfield, MA)	720	69	1,854	226	D	D	30	8	0	1977	Soy-food processing
255. Marine Structural Applications (Dumfries, VA)	720	69	3,257	397	D	B	30	8	0	1978	Marine construction
256. Mountain Air Delivery (Reno, NV)	718	69	1,395	171	D	F	28	7	0	1975	Transportation services
257. Wier & Associates (Arlington, TX)	717	69	1,313	161	D	C	20	3	0	1978	Civil-engineering consulting
258. Diet Center (Rexburg, ID)	716	69	26,285	3,223	A	A	240	23	1	1972	Franchise sales & support
259. Corporate Consulting & Devel. (Res. Triangle Pk., NC)	715	69	1,881	231	C	C	38	19	0	1972	Nuclear equip. quality control
260. Best Choice (Hershey, PA)	711	69	1,224	151	D	E	10	3	0	1972	Mail-order & retail sporting goods
261. Luckwood (Gladewater, TX)	709	69	2,179	269	D	C	25	7	0	1977	Excavating & paving contracting
262. American Office Equipment (Westmont, IL)	708	69	7,488	926	D	D	128	33	0	1978	Dist.office equipment
263. Resistance Technology (Arden Hills, MN)	706	69	3,800	471	F	F	126	27	0	1977	Mfr. custom electrical components
264. Information Bureau (380) (Dallas, TX)	700	68	4,000	500	A	A	85	12	0	1972	Investment computer serv.
265. L. J. Russo Ins. Serv. (153) (Emeryville, CA)	696	68	5,626	707	D	C	175	30	0	1973	Claims administrative serv.
266. Hourikon (Madison, WI)	696	68	1,670	210	C	E	37	8	0	1972	Mfr. microcomputer prod. & sys.
267. TravelCenter (Anchorage, AK)	691	68	53,000	6,700	D	D	215	35	0	1946	Travel services
268. Dorman Bogdonoff (91) (Andover, MA)	689	68	4,016	509	D	F	95	24	0	1977	Mfr. membrane keyboards
269. Gorham Model Products (Calabasas, CA)	686	67	795	101	D	E	10	1	0	1978	Radio-controlled model helicopters
270. Marketing Communications (Lenexa, KS)	685	65	5,634	718	A	B	59	18	0	1969	Direct-mail advertising

* INC. estimate: A. 16% or more; B. 11% to 15%; C. 6% to 10%; D. 1% to 5%; E. Breakeven; F. Loss

Chart continues on page 112

500

Rank, company ('82 rank)	Sales Growth 1978–82 Percent increase	Compound annual rate	'82 sales ($000)	'78 sales ($000)	Profit range * '82	'78	No. of employees '82	'78	Acquisitions '78-'82	Date founded	Business description
271. Polymer Devel. Labs (215) (Orange, CA)	678	67	10,275	1,321	D	D	30	6	1	1975	Polyurethane resin chemical sys.
272. Computer Science Press (196) (Rockville, MD)	677	67	2,905	168	D	E	14	4	0	1974	Science publishers
273. Euro Rep (Tustin, CA)	673	67	969	128	D	F	4	2	1	1977	Imports auto parts, racing apparel
274. Genie Filter (Dansville, NY)	672	67	2,339	303	A	C	67	11	1	1973	Mfr. industrial filters
275. Dr. Cully's Cartage (185) (Hunt Valley, MD)	669	67	2,231	290	D	E	47	9	0	1973	Trucking & warehousing
276. Dynamic Systems (McLean, VA)	668	66	5,419	706	D	D	110	4	0	1977	Engineering mgmt. consultants
277. Systems Strategies (102) (New York, NY)	663	66	4,221	553	D	C	66	21	0	1976	Computer software
278. Micromedia Marketing (Pasadena, CA)	658	66	3,066	405	D	D	14	5	0	1976	Dist. computer books & software
279. Mast Realty Group (New York, NY)	657	66	13,250	1,750	B	F	80	3	23	1977	Real estate acquis., mgmt. & sales
280. Promedics Data (Mountain View, CA)	655	66	1,279	169	F	E	16	4	0	1977	Turnkey health-care computer sys.
281. Iris Arc (Santa Barbara, CA)	655	66	2,518	334	D	C	36	14	0	1976	Mfr. & import crystal giftware
282. Endless Vacation International (Indianapolis, IN)	653	66	11,600	1,540	D	D	263	42	0	1974	Vacation exchange & travel serv.
283. Gulf States Mortgage (Atlanta, GA)	651	66	2,741	365	A	F	54	9	1	1962	Mortgage services
284. Elgem Sales & Services (Brooklyn, NY)	650	65	3,000	400	A	C	50	10	0	1975	Install, maintain office furniture
285. Northern Wire & Cable (Troy, MI)	650	65	14,048	1,873	D	C	73	20	0	1976	Dist. wire & cable
286. Handling Systems Engineering (Jacksonville, FL)	649	65	2,599	347	D	D	15	3	0	1978	Materials handling & equip. dist.
287. Midstate Electronics (Middletown, CT)	645	65	823	111	D	D	7	2	0	1977	Electronic distributor
288. Paulsel Lumber (Fort Worth, TX)	642	65	5,115	689	C	A	10	5	0	1945	Wholesale lumber & investments
289. Interwest Communic. (138) (Denver, CO)	638	66	6,825	925	B	A	60	4	5	1975	Private telephone company
290. Parmed Pharmaceuticals (Niagara Falls, NY)	637	65	6,994	949	D	D	65	14	0	1968	Dist. generic pharmaceuticals
291. Gator Transportation (202) (Orlando, FL)	636	65	4,590	624	B	B	57	21	3	1974	Cable TV & transportation
292. Commercial Prpty. Serv. (109) (Cleveland, OH)	635	65	17,425	2,369	D	C	1500	350	3	1974	Building maintenance & security
293. International Microcircuits (Santa Clara, CA)	635	65	9,895	1,346	A	D	60	17	0	1972	Custom integrated circuits
294. PBS Computing (136) (St. Paul, MN)	631	64	3,457	473	F	D	50	9	1	1969	Data services & turnkey computer sys.
295. Dixie Auto Transport (Jacksonville, FL)	623	64	21,490	2,973	D	E	200	32	4	1939	Automobile transportation
296. MBT Associates (303) (San Francisco, CA)	622	64	5,113	708	C	C	94	28	0	1954	Architecture
297. Advanced System Applications (Glendale Heights, IL)	622	64	11,340	1,571	B	B	227	32	0	1977	Insurance computer sys.
298. Executone Telecom (Rochester, NY)	619	64	2,227	310	D	D	32	13	0	1976	Telephone sys. design, sale & serv.
299. Elographics (Oak Ridge, TN)	619	63	1,770	246	A	A	35	8	0	1971	Computer peripherals
300. Rosenthal Construction (Barton, VT)	616	64	2,437	340	D	D	55	0	0	1977	General contractor
301. D.P.I. Industries (349) (Bloomington, MN)	616	64	55,100	7,700	A*	B*	180	110	0	1975	Mail-order hardware
302. Conference Management (49) (Norwalk, CT)	616	64	7,220	1,009	C	C	36	9	0	1976	Manages trade shows & conferences
303. Intertec Components (Longwood, FL)	615	64	1,870	261	E	B	13	3	0	1976	Dist. electronic products
304. Ruiz Food Products (172) (Tulare, CA)	614	63	9,721	1,361	C	D	204	29	0	1964	Processes frozen Mexican food
305. Starving Students (Los Angeles, CA)	612	63	2,868	403	C*	D	200	25	0	1973	Moving companies

* INC. estimate. A: 16% or more, B: 11% to 15%, C: 6% to 10%, D: 1% to 5%, E: Breakeven, F: Loss

Rank, company ('82 rank)	Sales Growth 1978–82 Percent increase	Compound annual rate	'82 sales ($000)	'78 sales ($000)	Profit range* '82	'78	No. of employees '82	'78	Acquisitions '78–'82	Date founded	Business description
306. Hidden Villa Ranch (Placentia, CA)	610	63	7,100	1,000	D	D	40	3	0	1977	Wholesale dist. eggs & cheese
307. Jeffrey Norton Publishers (Guilford, CT)	609	63	1,922	271	E	B	25	4	1	1972	Audio/visual instruct. publishing
308. Sciper (Williamsville, NY)	609	63	2,408	340	D	D	29	6	0	1975	Electronics R&D
309. Cyborg Systems (Chicago, IL)	605	63	6,101	865	B	C	51	9	0	1974	Applications software licensing
310. Lawson Associates (38) (Minneapolis, MN)	603	63	5,796	824	D	B	100	17	0	1975	Computer software
311. Wiedemann & Johnson (317) (Dallas, TX)	603	63	9,362	1,332	B	B	15	4	0	1967	Design, mkt., admin. benefit plans
312. Theriault's (191) (Annapolis, MD)	602	63	4,405	627	C	D	21	5	0	1977	Auction house
313. R&J Corvette Parts (Anaheim, CA)	599	63	1,271	182	B	C	5	2	1	1978	Retail sales & mfr. Corvette parts
314. Commer. Glass & Glazing (132) (Mesa, AZ)	595	62	4,804	692	D	C	77	18	1	1975	Glazing contractor
315. Webco Press (Lapeer, MI)	594	62	4,228	609	C	B	38	23	0	1969	Commercial printing
316. Delphi Glass (78) (Lansing, MI)	589	62	2,774	402	C	A	53	6	0	1976	Mail-order stained-glass supplies
317. Chioke International (New York, NY)	589	62	82,677	12,000	D	E	16	16	0	1970	Defense contracting
318. Megas Manufacturing (Cleveland, OH)	586	62	5,874	856	C	C	60	25	0	1976	Mfr. health & beauty aids
319. North American T.B.A. (Philadelphia, PA)	586	62	17,148	2,500	E	D	55	15	3	1949	Automotive aftermarket distributor
320. ACE Equipment Rentals (Baton Rouge, LA)	582	62	1,078	158	D	B	8	1	0	1978	Industrial rental equipment
321. Metaltech (257) (Kirkwood, MO)	578	61	2,851	421	B	A	11	4	0	1976	Mfr. rain-carrying goods
322. San Antonio Developers (San Antonio, TX)	577	61	1,018	150	C	C	6	3	0	1978	Mfr. specialty coatings
323. All American Turf Beauty (Winterset, IA)	576	61	693	103	C	D	15	4	0	1976	Lawn service representative
324. Setpoint (282) (Houston, TX)	576	61	7,300	1,080	C	C	93	25	0	1977	Eng., computer control applications
325. Amex Systems (Hawthorne, CA)	575	61	58,591	8,675	D	D	664	307	0	1971	Mfr. electronic equip. & sys.
326. Red Calliope & Associates (57) (Los Angeles, CA)	572	61	6,257	931	B	A	34	10	0	1969	Mfr. infant bedding
327. Paul Newman's Coney Is. Restaurant (Alamosa, CO)	569	61	15,109	2,257	A	C	983	26	1	1976	Operate & franchise restaurants
328. Altus (San Jose, CA)	569	61	5,642	843	F	F	330	30	1	1976	Mfr. lithium batteries
329. Jackalope Pottery (Santa Fe, NM)	567	61	1,060	159	C	B	15	4	0	1976	Retail & wholesale imports
330. Oxford Software (203) (Hasbrouck Heights, NJ)	566	61	8,737	1,312	C	E	81	21	0	1974	Computer software devel. & sales
331. Southern Accents Magazine (Atlanta, GA)	566	61	2,959	444	A	F	9	5	0	1977	Magazine publisher
332. Business Planning Associates (Lancaster, PA)	564	61	996	150	D	D	21	4	0	1977	Insurance
333. Livingston Office Products (Tampa, FL)	562	60	8,081	1,220	C	D	19	15	0	1976	Contract business furniture
334. David Boland (107) (Titusville, FL)	561	60	6,416	971	D	C	60	20	0	1976	General contractor
335. Cheese & Specialty Foods (Denver, CO)	560	60	7,578	1,148	D	D	20	7	0	1977	Importer/dist. specialty foods
336. Link-Allen & Associates (San Mateo, CA)	558	60	736	112	F	F	19	5	0	1976	Insurance
337. Thermal Systems (Salt Lake City, UT)	557	60	9,200	1,400	C	C	77	14	0	1977	Mfr. urethane foam insulation
338. Automation Electronics (155) (Oakland, CA)	556	60	8,191	1,248	B	C	120	40	0	1976	Mfr./retail telecommun. equip.
339. Investors Management (339) (Raleigh, NC)	554	60	161,733	24,733	C	C	10,000	1,300	3	1971	Restaurant management
340. Flexible Packaging (Hayward, CA)	552	60	2,933	450	D	D	70	3	1	1978	Computer packaging material

*INC. estimate. A: 16% or more; B: 11% to 15%; C: 6% to 10%; D: 1% to 5%; E: Breakeven; F: Loss

Rank, company ('82 rank)	Sales Growth 1978–82 Percent increase	Compound annual rate	'82 sales ($000)	'78 sales ($000)	Profit range * '82	'78	No. of employees '82	'78	Acquisitions '78-'82	Date founded	Business description
341. Conservatree Paper (San Francisco, CA)	551	60	3,683	566	E	F	7	4	0	1977	Mfr./dist. recycled paper products
342. Houston Copy (129) (New York, NY)	550	60	1,461	225	E	C	25	10	0	1973	Printing, Xerox & typing serv.
343. Cameo Fashions Access. (270) (Beverly Hills, CA)	546	60	3,974	613	A	A	257	82	0	1977	Wholesale jewelry
344. Granite Financial (126) (Sacramento, CA)	548	60	17,029	2,629	C	D	232	45	0	1977	Mortgage banking services
345. Integral Systems (Walnut Creek, CA)	545	59	7,100	1,100	C	C	85	22	1	1972	Devel./sales software products
346. Harmony Foods (92) (Santa Cruz, CA)	545	59	29,286	4,538	D	D	200	50	0	1969	Natural snacks & confectionery foods
347. Systems Architects (256) (Randolph, MA)	543	59	8,668	1,348	C	C	275	35	0	1970	Computer sys. software prod.
348. Sachs/Freeman Assoc. (250) (Bowie, MD)	543	59	6,314	982	D	D	96	38	0	1969	Consulting/engineering
349. Thomas J. Doty's ImageMakers (343) (Santa Barbara, CA)	541	59	1,384	216	C	B	21	4	2	1975	Advertising & photo finishing
350. American Intl. Insurance (455) (Creve Coeur, MO)	540	59	1,920	300	E	D	8	3	1	1975	General insurance agency
351. Aquidneck Data (39) (Middletown, RI)	539	59	6,804	1,065	D	C	183	38	0	1976	Computer software development
352. HTC (84) (Concord, MA)	539	59	2,252	353	D	B	35	5	0	1974	Mfr. vapor-phase soldering sys.
353. Little Barn (248) (Little Rock, AR)	534	59	1,675	264	B	C	23	5	0	1967	Retail furniture, waterbeds
354. Source Northwest (Woodinville, WA)	533	59	3,338	527	D	C	19	7	0	1978	Dist. hardware & housewares
355. Munsen's Discovery Ent. (245) (Hinsdale, IL)	531	58	12,038	1,907	E	F	140	21	4	1974	Senior citizens' tours
356. Contract Furnish. & Sys. (186) (New York, NY)	531	58	14,498	2,297	A	A	59	9	2	1978	Office furniture dealer
357. Quintron (448) (Quincy, IL)	531	58	8,618	1,366	C	F	128	30	0	1970	Mfr. radio transmitters
358. Leichtung (233) (Cleveland, OH)	530	58	8,566	1,360	C	C	55	8	0	1974	Mail-order tools
359. Lufran (Macedonia, OH)	530	58	2,053	326	A	A	37	14	0	1974	Mfr. chemical processing equipment
360. Urban Electrical (Methuen, MA)	530	58	3,670	583	D	E	50	20	0	1960	Electrical construction contractor
361. Skybird Publishing (New Orleans, LA)	529	58	1,697	270	B	C	13	7	0	1974	Trade magazine publisher
362. Ad-Tek Engineering Serv. (71) (Irvine, CA)	528	58	3,776	601	D	D	68	18	0	1974	Temporary technical personnel
363. Ross Systems (Palo Alto, CA)	527	58	5,917	943	F	B	82	13	0	1972	Financial computer software
364. Sybex (Berkeley, CA)	525	58	5,000	800	C	C	60	35	0	1976	Computer book publisher
365. Industrial Training (67) (Rockville, MD)	524	58	3,211	515	C	D	35	12	0	1977	Multimedia indust. training programs
366. Graphic Technology (150) (Olathe, KS)	522	58	5,061	813	C	F	55	20	0	1976	Mfr. bar-coded labels
367. Pertron Controls (125) (Canoga Park, CA)	522	58	5,005	805	D	B	54	8	0	1975	Mfr. microprocessor welding controls
368. Allen Corporation of America (Alexandria, VA)	521	58	6,464	1,041	D	C	72	15	0	1975	Human factors engineering
369. Environmental Earthscapes (Tucson, AZ)	520	58	1,803	291	C	C	65	12	0	1976	Commercial landscaping
370. Norwich Togs (Sandwich, NY)	518	58	3,683	596	D	F	50	14	0	1976	Mfr. apparel
371. KMCO (Crosby, TX)	518	58	16,014	2,583	C	A	80	30	0	1975	Specialty chemicals, processing
372. Vie de France (Vienna, VA)	515	57	28,300	4,600	C	C	1030	140	1	1972	Bakery & restaurant chain
373. American Business Lists (376) (Omaha, NE)	514	57	5,650	920	B*	C*	120	10	0	1972	Business list compiler
374. Morino Associates (290) (Vienna, VA)	513	57	8,232	1,342	A	B	61	16	0	1973	Develops & markets system software
375. Winona Knitting Mills (Winona, MN)	513	57	8,701	1,419	D	D	55	11	0	1977	Retail knitted apparel

* INC. estimate: A. 16% or more; B. 11% to 15%; C. 6% to 10%; D. 1% to 5%; E. Breakeven; F. Loss

Rank, company ('82 rank)	Sales Growth 1978–82 Percent increase	Compound annual rate	'82 sales ($000)	'78 sales ($000)	Profit range* '82	'78	No. of employees '82	'78	Acquisitions '78-'82	Date founded	Business description
376. Cyber Systems (Anaheim, CA)	513	57	4,900	800	B	F	45	14	0	1977	Computer-based data acquisition sys.
377. Nucleus (266) (Oak Ridge, TN)	511	57	4,531	741	A	A	78	51	2	1968	Design/mfr. nuclear instrumentation
378. Flosean Instrument (Seattle, WA)	511	57	3,888	636	D	A	70	10	0	1969	Mfr. fuel-flow sensors
379. Bomark Group (165) (Houston, TX)	511	57	4,814	788	C	C	56	8	1	1975	Wholesale & mfr. sportswear
380. Organizational Dynamics (380) (Burlington, MA)	510	57	2,318	380	B	E	28	5	0	1970	Management consultants
381. Pacific Envelope (229) (Anaheim, CA)	508	57	2,852	469	C	C	22	8	1	1959	Mfr. envelopes
382. Webb, Murray & Assoc. (169) (La Porte, TX)	508	57	2,540	418	C	E	52	14	0	1974	Safety & fire protection engineering
383. American Marketing Services (Ft. Lauderdale, FL)	507	57	10,705	1,763	D	F	100	20	0	1978	Telemarketing & advertising
384. W-B Pump & Supply (31) (Pampa, TX)	507	57	29,757	4,903	D	D	68	10	0	1971	Oil-field production equip. sales
385. JBM Electronics (St. Louis, MO)	507	57	1,177	194	A	C	17	10	0	1975	Microprocessor-based commun. equip.
386. R&E Electronics (Wilmington, NC)	506	57	1,164	192	D	F	13	5	0	1952	Specialized telecommunications sys.
387. Star Pak Solar Systems (Novi, MI)	504	57	1,356	224	D	D	32	7	0	1975	Mfr., sell & install solar heaters
388. J. A. Cornwell (7) (Pasco, WA)	503	57	20,560	3,408	D	D	9	9	0	1975	Construction management
389. Wilson Laboratories (Orange, CA)	500	57	3,024	504	B	B	33	9	0	1973	Mfr. peripheral test equipment
390. Sage Systems (409) (Rockville, MD)	499	56	5,009	836	C	C	101	20	3	1973	Computer software products
391. Starmark (Chicago, IL)	498	56	1,972	330	C	B	8	2	0	1978	Advertising/marketing
392. North Star Computers (179) (San Leandro, CA)	496	56	41,142	6,900	C	A	335	36	0	1976	Mfr. microcomputers
393. Corpane Industries (344) (Louisville, KY)	496	56	2,028	340	A	E	46	12	0	1973	Mfr. ultrasonic systems
394. Creative Mgt. Systems (465) (McLean, VA)	495	56	632	106	C	D	16	7	0	1976	Telecommunications systems
395. Perfusion Services (123) (Brighton, MI)	494	56	5,822	980	C	C	70	8	0	1968	Medical services
396. Data Translation (141) (Marlboro, MA)	494	56	8,085	1,362	D	D	115	38	0	1973	Microcomputer data acquisition sys.
397. Queen Oxygen (213) (Worthington, OH)	493	56	3,567	601	D	D	22	6	0	1975	Welding supply distributor
398. Horwath Electric Motors (266) (Erie, PA)	493	56	771	130	C	B	15	6	0	1950	Electric motor repair & sales
399. Foam Systems (Riverside, CA)	491	56	18,794	3,180	D	D	100	14	1	1975	Mfr. rigid polyurethane foam
400. Institute for Resource Mgmt. (Annapolis, MD)	487	56	19,607	3,339	D	F	24	12	0	1967	Nuclear instrument rental & sales
401. Research, Analysis & Mgmt. (209) (Rockville, MD)	487	56	5,542	944	D	D	92	35	0	1975	Marine engineering & project mgmt.
402. EDM Precision Products (299) (Ft. Lauderdale, FL)	487	56	1,434	244	D	B	35	15	0	1974	Aeorspace contract manufacturer
403. SLM Instruments (364) (Urbana, IL)	486	56	3,900	665	C	C	39	14	1	1973	Mfr. analytical instruments
404. American Med. Therapeutics (Norwood, MA)	485	56	1,366	233	D	B	11	3	0	1977	Respiratory home-care, hospital sales
405. Robert E. Bayley Construction (Seattle, WA)	483	55	39,149	6,718	D	D	275	45	0	1963	Commercial & industrial construction
406. Sunshine Beauty Supplies (Grenada Hills, CA)	481	55	2,673	460	C	C	38	11	0	1974	Retail/wholesale beauty supplies
407. Pretty Neat Industries (199) (Pompano Beach, FL)	481	55	5,159	888	A	A	130	15	0	1977	Mfr. cosmetic organizers
408. Mid City Web (423) (Chicago, IL)	480	55	5,800	1,000	C	F	100	25	0	1976	High-volume printing
409. W. B. Wood (Orange, NJ)	479	55	24,900	4,297	D	D	120	35	0	1905	Business furniture
410. Western Controls (Salt Lake City, UT)	478	55	1,036	179	D	D	5	2	0	1977	Electrical distributor

* INC. estimate. A: 16% or more; B: 11% to 15%; C: 6% to 10%; D: 1% to 5%; E: Breakeven; F: Loss

Rank, company ('82 rank)	Sales Growth 1978–82 Percent increase	Compound annual rate	'82 sales ($000)	'78 sales ($000)	Profit range * '82	'78	No. of employees '82	'78	Acquisitions '78-'82	Date founded	Business description
411. Holiday of Orlando (Orlando, FL)	478	55	8,393	1,453	C	D	29	11	0	1978	Recreational-vehicle dealer
412. Eastern Business Machines (Greenbelt, MD)	476	55	5,028	873	C	D	112	30	0	1954	Training support on business systems
413. Pillsbury Chemical & Oil (88) (Detroit, MI)	475	55	5,750	1,000	C	C	48	18	2	1924	Mfr. industrial lubricants, chemicals
414. Stoops Express (182) (Anderson, IN)	474	55	20,436	3,560	D	D	300	50	1	1976	Interstate regulated motor carrier
415. GNP (Pasadena, CA)	471	55	590	103	B	C	6	3	0	1977	Mfr. audio/video computer sys.
416. Winn Galleries (Seattle, WA)	470	55	1,278	224	D	D	13	2	0	1977	Publish & dist. prints & art books
417. Los Alamos Technical (110) (Los Alamos, NM)	470	55	6,040	1,060	D	F	115	18	0	1976	High-tech professional consulting
418. Vocational Training Ctr. (358) (Saint Louis, MO)	470	54	1,405	247	D	D	60	12	0	1961	Private trade school
419. North American Vending (Lexington, KY)	469	54	880	155	D	C	12	2	0	1974	Food & vending service
420. Maryland Computer (Forest Hill, MD)	468	54	1,565	276	D	D	24	7	0	1976	Hardware/software suppl. for business
421. Phillips Publishing (268) (Bethesda, MD)	467	54	6,490	1,144	D	C	60	12	11	1973	Publish newsletters
422. Whipps (Athol, MA)	467	54	1,021	180	D	C	11	3	0	1977	Water control equipment
423. Technical Systems Consultants (Chapel Hill, NC)	466	54	1,020	180	A	A	16	7	0	1976	Computer systems software
424. JWK International (314) (Annandale, VA)	464	54	9,395	1,664	D	D	200	50	0	1973	Government R&D
425. Spartan Paper & Office Supply (Lansing, MI)	459	54	3,725	666	D	C	42	13	2	1975	Distr. office products & furniture
426. Advanced Mfg. & Devel. (120) (Willits, CA)	459	54	2,259	404	D	F	37	15	0	1976	Sheet metal & machining
427. Landau Building (Allison Park, PA)	458	54	7,894	1,414	D	D	37	17	0	1976	General contracting
428. Amigo Sales (212) (Bridgeport, MI)	458	54	12,099	2,170	D	D	145	40	1	1968	Mfr. & sales of wheelchairs
429. Satter Cos. (116) (West Palm Beach, FL)	457	54	28,227	5,071	D	C	97	34	0	1972	Real estate development
430. Zimdar Enterprises (Wyoming, MI)	455	53	579	104	C	B	10	8	0	1974	Picture frames & framing supplies
431. Avanti Communications (Newport, RI)	454	53	3,829	691	D	D	53	21	0	1976	Mfr. & sell high-speed commun. equip.
432. Miller Oil (336) (Norfolk, VA)	453	53	23,878	4,318	D	D	85	23	6	1977	Petroleum distributor
433. Office Systems (Charlotte, NC)	453	53	1,701	308	C	D	29	17	0	1972	Microcomputer/word processing sales
434. Lube 'n Go (El Paso, TX)	451	53	728	132	C	A	24	12	0	1976	Automotive lubrication service
435. Dixon Group (Norfolk, VA)	451	53	1,140	207	C	C	14	8	0	1978	Marketing, advertising & PR
436. Century Data Systems (237) (Raleigh, NC)	450	53	8,800	1,600	D	D	110	43	0	1975	Electronic sales & service
437. Anaheim Custom Extruders (Anaheim, CA	450	53	1,448	263	D	D	29	7	0	1977	Mfr. plastic tubing & shapes
438. Custom Feed Services (Norfolk, NE)	449	53	1,837	334	C	D	13	5	0	1968	Mfr. vit./min. premixes for livestock
439. Omega Performance (San Francisco, CA)	449	53	3,317	604	D	A	40	35	0	1976	Develop training programs
440. California Labels (Fresno, CA)	447	53	2,358	431	D	C	65	15	0	1975	Mfr. pressure-sensitive labels
441. McDougal, Littell (Skokie, IL)	447	53	10,810	1,975	D	D	90	20	0	1969	Educational publisher
442. S. T. Research (Newington, VA)	445	53	4,195	770	D	D	86	20	0	1971	Microprocessor-based systems
443. Cherokee of California (201) (Gardena, CA)	444	53	36,140	6,646	D	D	740	332	0	1968	Mfr. women's shoes & apparel
444. Phone Directories (228) (Provo, UT)	443	53	3,166	583	A	C	16	8	0	1973	Indep. phone directory publisher
445. Spectrum Foods (San Francisco, CA)	441	52	13,152	2,433	C	D	450	125	0	1972	Restaurant devel., constr. & mgmt.

* INC. estimate. A. 16% or more; B. 11% to 15%; C. 6% to 10%; D. 1% to 5%; E. Breakeven; F. Loss

Rank, company ('82 rank)	Sales Growth 1978–82 Percent increase	Compound annual rate	'82 sales ($000)	'78 sales ($000)	Profit range* '82	'78	No. of employees '82	'78	Acquisitions '78-'82	Date founded	Business description
446. Skyway Freight Systems (Santa Cruz, CA)	440	52	8,100	1,500	D	E	65	17	0	1977	Freight transportation
447. Patson's Press (Santa Clara, CA)	440	52	680	126	C	F	22	4	0	1968	Commercial printer
448. Custom Decor (448) (Dover, DE)	440	52	2,716	503	D	C	28	6	0	1974	Importer/wholesaler of giftware
449. Allied Broadcast Equipment (Richmond, IN)	439	52	9,700	1,800	D	D	36	12	0	1966	Audio equipment sales
450. Collier-Jackson (Tampa, FL)	439	52	3,742	695	D	E	63	23	0	1975	Computer software products sales
451. Ostarr (La Grange, IL)	437	52	548	102	D	F	4	2	1	1976	Mfr. concrete repair products
452. Midcom (Southfield, MI)	435	52	10,047	1,879	D	A	250	100	4	1974	Information storage services
453. Brun-O-Matic (Canastota, NY)	435	52	2,734	511	C	C	48	7	0	1955	Food service & vending
454. Anadex (287) (Chatsworth, CA)	435	52	26,474	4,952	D	D	360	120	0	1957	Dot-matrix printers
455. Geo-Centers (Newton, MA)	434	52	2,218	415	D	C	35	5	0	1973	High-tech R&D
456. W. A. Brown Instruments (Orlando, FL)	433	52	8,092	1,517	D	D	68	28	0	1948	Dist. computer peripherals
457. Domino's Pizza (Ann Arbor, MI)	433	52	128,696	24,125	D	F	500	90	3	1960	Fast-food franchising
458. Connecticut Travel Serv. (286) (New Britain, CT)	433	52	16,000	3,000	D	D	72	15	0	1970	Travel agency
459. Technical Ceiling Systems (Fenton, MO)	432	52	3,063	575	D	C	32	12	1	1974	Mfr. ceiling components
460. Aloe Charm (284) (King of Prussia, PA)	432	52	7,450	1,400	D	D	75	28	0	1975	Cosmetic party plans
461. Tarrant Service Agency (117) (Louisville, KY)	432	52	2,714	510	C	C	8	5	0	1976	Distribute air conditioning parts
462. Signal Vision (Laguna Hills, CA)	432	52	5,000	940	A	A	8	4	0	1976	Mfr./dist. CATV equipment
463. Crafco (156) (Chandler, AZ)	431	52	9,563	1,802	B	B	60	12	0	1976	Mfr. pavement maintenance products
464. Summagraphics (161) (Fairfield, CT)	430	52	24,209	4,570	D	C	395	195	0	1972	Mfr. digitizers & CAD/CAM equip.
465. Kolin Plumbing (320) (West Babylon, NY)	429	52	2,996	567	C	B	43	12	0	1974	Installation of plumbing systems
466. Computer Sys. Research (98) (Avon, CT)	428	52	1,985	376	C	A	23	1	0	1974	Computer systems training
467. TOM Software (Seattle, WA)	428	52	2,964	562	C	B	45	30	0	1974	Computer software development
468. Komfort Koach (Louisville, KY)	427	52	5,714	1,083	D	D	77	22	0	1975	Vehicle modification
469. Sonic Air Courier (122) (Inglewood, CA)	427	51	7,900	1,500	A	B	100	20	0	1976	Air courier
470. Dryden (Indianapolis, IN)	425	51	1,923	367	D	F	27	10	0	1968	Mfr. medical devices
471. Command Plastic (425) (Akron, OH)	424	51	3,175	606	F	C	80	18	1	1970	Mfr. vinyl packaging
472. Systems Group (Santa Clara, CA)	423	51	1,923	368	A	A	47	13	0	1973	Microcomputer software services
473. Systec (Sanford, FL)	422	51	2,090	400	D	C	44	11	0	1977	Computer maintenance
474. Unwin, Scheben, Korynta, Huettl (Anchorage, AK)	421	51	5,320	1,021	D	D	50	25	0	1972	Architectural & engineering serv.
475. Xentek (168) (San Marcos, CA)	421	51	14,971	2,875	D	C	460	215	0	1972	Mfr. power suppliers & transformers
476. Boutique . . . Caprice (Chicago, IL)	421	51	727	140	C	A	6	3	0	1976	Women's ready-to-wear store
477. Micro-Mell (258) (Indianapolis, IN)	418	51	4,441	857	C	C	51	12	0	1963	Mfr. sheet metal accessories
478. Sewex (308) (Boston, MA)	417	51	1,256	243	A	F	12	3	0	1977	Publishing & publisher's ad rep
479. Meistergram (Cleveland, OH)	417	51	9,464	1,832	B	C	80	55	0	1933	Mfr. industrial embroidery machines
480. Seneca Balance (416) (Depew, NY)	415	51	2,100	408	A	F	35	10	2	1975	HVAC testing & balancing

* INC. estimate. A. 16% or more; B. 11% to 15%; C. 6% to 10%; D. 1% to 5%; E. Breakeven; F. Loss

Rank, company ('82 rank)	Sales Growth 1978–82 Percent increase	Compound annual rate	'82 sales ($000)	'78 sales ($000)	Profit range * '82	'78	No. of employees '82	'78	Acquisitions '78-'82	Date founded	Business description
481. F. H. Chase (451) (Avon, MA)	415	51	6,567	1,276	D	D	40	10	0	1973	Sell & install interior systems
482. Heyt Investment (Bloomington, MN)	413	51	11,641	2,269	B	C	90	75	0	1965	Construction
483. Juniata Office Supplies (Altoona, PA)	412	50	566	111	C	C	10	3	0	1978	Office equipment sales
484. Libra Programming (Salt Lake City, UT)	411	50	2,772	542	C	A	55	12	0	1977	Micro software & hardware sales
485. Lafayette Manufacturing (Hayward, CA)	411	50	8,247	1,613	C	F	82	27	0	1937	Mfr. precast concrete
486. Berger Metal Fabrication (Mountain View, CA)	411	50	1,612	315	B	A	26	10	0	1976	Sheet-metal products
487. IMS International (Carson City, NV)	410	50	16,262	3,188	A	C	105	25	0	1975	Mfr. microcomputer systems
488. Booth Organization (Gaithersburg, MD)	408	50	990	195	A	A	165	30	0	1977	Office cleaning
489. Film Technology (Hollywood, CA)	408	50	750	148	D	F	16	8	0	1972	Motion picture restoration
490. Lear Hunter Aviation (Miami, FL)	405	50	643	127	C	F	4	1	0	1978	Wholesale aviation parts distributor
491. Klatz Press (Palo Alto, CA)	405	50	914	181	A	A	3	3	0	1977	Publisher
492. Red Lion Controls (York, PA)	404	50	5,281	1,047	C	C	80	28	0	1973	Mfr. industrial electronic equip.
493. Specialty Surfacing (357) (Honolulu, HI)	403	50	825	164	C	B	13	5	0	1976	Contractors
494. SuperFlow (Colorado Springs, CO)	402	50	1,260	251	C	C	15	4	0	1975	Mfr. microprocessor-controlled sys.
495. Timberland (Newmarket, NH)	400	50	60,000	12,000	C	D	1000	250	0	1933	Mfr./sell boots & shoes
496. Dav-El Livery Services (158) (New York, NY)	400	50	10,000	2,000	F	D	310	40	0	1971	Chauffeured limousine services
497. BMC (St. Charles, IL)	400	50	3,000	600	C	D	10	2	0	1978	Mfr. fiberglass reinforced materials
498. Engineered Materials (Denver, CO)	399	49	1,790	359	D	F	3	2	0	1976	Sales of construction materials
499. Tank Services (Bolivar, OH)	398	49	1,191	239	C	A	20	3	0	1975	Abrasive blasting
500. Robert Douglass Assoc. (224) (Houston, TX)	397	49	3,140	632	B	D	50	18	2	1973	Hospital & health-care consulting

HOW THE INC. 500 WERE SELECTED

The 1983 INC. 500 is the second annual ranking of the 500 fastest-growing privately held smaller businesses in the United States. To be included on the list, each company had to meet the following qualifications:

1. The company is an independent, privately held corporation, proprietorship, or partnership.

2. The company shows a sales history of at least five years. Companies founded after 1978 were excluded.

3. Sales in 1978 were at least $100,000 but less than $25 million.

4. The company's 1982 sales exceeded its 1981 sales. Companies showing growth in the five-year period, but a sales decline in 1982, were excluded.

While the criteria were relatively simple, the task of identifying the 500 finalists was complex, both because of the numbers of companies involved and because the project depended on information that is generally regarded as confidential.

INC. estimates that the total universe of potential INC. 500 candidates exceeded 500,000 companies. The research relied on two primary sources: INC. readers and in-house records. In addition, business groups, trade associations, and professional service firms were alerted to the search for high-growth companies by letter, advertisements, and personal contact.

Business reply cards inserted in the May 1983 issue and advertisements in the May, June, and July 1983 issues invited readers to nominate candidates for the INC. 500. Drawing on the publication's national circulation of more than 400,000, the cards generated more than 5,000 entries from April 1 to July 31. INC.'s in-house database was screened to produce an additional 2,000 candidates, and another 1,500 names were added from directories and editorial files.

On July 1, data forms were sent to 8,500 company executives. About 2,000 responses were received by the deadline of August 31. From those responses, more than 650 smaller, privately owned companies whose sales had at least quadrupled in the past five years were identified and ranked by percentage gain in sales. Information on these companies as well as companies from last year's list was then verified through signed statements from company officers, support material from outside professionals, and telephone interviews with executives of each company.

The list of INC. 500 companies was compiled by senior editor Bradford Ketchum Jr. and research editor Elyse Friedman, researchers Maura McEnaney and Carol Torres, and interviewers Elizabeth Ansin Ehrenfeld and Michael Calvin.

million in sales, a 437% increase over 1982's revenues of $9.4 million.

Although some analysts predict a shakeout among the PC-compatible makers, Diaz remains confident. "The market will always be big enough to accommodate half a dozen good-size companies," he says. But to hedge his bets, he has raised $3 million in venture capital, plans a public offering by year's end, and has pursued large retail chains as well as OEMs, a distribution channel that competitors have largely ignored. "We narrowed our vision to a more defined marketplace, which turned out to be the right one," he says. Before, "we were just an also-ran."

Don Lehr, chairman and chief executive officer of IMS International (#487), a Carson City, Nev., manufacturer of multiuser, multiprocessor computer systems, doesn't include a high degree of IBM PC compatibility in his plans for future machines.

Lehr and his partner, Al Fiegehen, founded IMS in 1975 to make electronic controls, and eased into micro manufacturing when a computer store asked the men if they could make memory boards. Now, vertical integration (IMS owns its own metal shop), a two-year warranty (the industry standard is 90 days), and overseas sales (over 40% of its product goes to more than 14 foreign countries) has stoked company sales. Like Diaz, Lehr plans to raise funds with a small public offering. While his micros can run some IBM software, Lehr sees diversification as the key to future growth. IMS recently introduced a new terminal, and Lehr spots fresh opportunities in his original business: the manufacture of controls. "We consider ourselves an electronics manufacturer that happens to make computers," he explains.

The new product lines introduced, or contemplated, by these three manufacturers are certainly one step on the road to survival. "Any reasonably intelligent person with some resources can build a hit personal computer," says Jack Karp, program director of the personal computing service at Gartner Group Inc., a strategic-planning firm in Stamford, Conn. "Adam Osborne proved that. What's much harder is to transcend a single product and product concept, then move on to multiple product concepts. Companies that are unable to do this are going to get killed."

> "Companies that are unable to [move on to multiple product concepts] are going to get killed."

But the future that industry analysts predict for the three companies isn't as rosy as their CEOs might like. Karp, for instance, keeps a "dirty dozen" list of micro manufacturers that he thinks will be key players in 10 years. None of the INC. 500 companies is on it (although Columbia Data, he feels, has the best shot). Clearly, if the three micro manufacturers are to prosper—or make it at all—they are going to have to engage in some fancy footwork.

IBM's presence—and the subsequent coming of age of the micrcomputer as a business machine—has only served to expand markets for the INC. 500 companies making micro-related devices. These include a magnetic tape-drive manufacturer (Data Electronics Inc. [#156], San Diego, Calif.), a computer board maker (Heurikon Corp. [#266], Madison, Wis.), two companies that make interfaces (Elographics Inc. [#299], Oak Ridge, Tenn., and Dorman Bogdonoff), a disk-controller manufacturer (Interphase Corp. [#201], Dallas) a modem manufacturer (Hayes Microcomputer Products Inc. [#4], Norcross, Ga.), and a printer company (Anadex Inc. [#454], Chatsworth, Calif.).

Unlike micros, which have almost become commodities, many of the products these companies produce demand sophisticated technological know-how. "We're not making something in which there's a backlog of knowledge," says Elographics president William Gibson. But the companies, although technology-driven, have not neglected their marketing strategies.

Anadex, a manufacturer of dot-matrix printers, has at least 20 competitors. And, says chairman and CEO Jack Weaver, "there are more coming all the time." Like other INC. 500 companies, however, Anadex benefited from an early start.

The company was founded in 1957 to make industrial control instruments. In 1977, Weaver saw a chance to grow with micros and "grabbed it." In an industry dominated by electronics whiz-kids, he chose to develop a printer—a product that required his ingenuity as a mechanical engineer. "Most anyone can put together an electronics edge these days," he says. To keep its position in the marketplace, Anadex doubled its advertising budget from 1981 to 1983.

Interphase faces little competition for its specialized disk-controllers—devices that link micros with very fast, high-capacity hard disks. The company was first to market with its product and, says president Michael Cope, "only a half-dozen companies are competent technically to do what we do."

Cope founded Interphase in 1974 to advise other Texas businesses on how to apply the new micro technology to their products. (It was responsible for the design and development work for all Radio Shack models, for example.) Then Cope decided to produce his own product—one that would require little capitalization, demand technological sophistication, and plug a hole in the marketplace. "We're a niche marketer," says Cope. "We find niches that are not well served by [big companies] and exploit them. Then we dominate the niche."

To maintain its growth, Interphase has pumped funds into the development of the Maverick, a new, high-performance disk controller for the IBM PC. "You can't turn off the [research and development] spigot," Cope insists. He has the right idea. Only from R&D will these companies find the flexibility and new products they will need to survive. —*Abby Solomon*

INDUSTRY BY INDUSTRY . . . BY THE NUMBERS

Rank by growth	Business type	No. of companies	Avg. growth rate 1978–82	Rank by growth	Avg. sales by employee 1982 ($000)	rank	Avg. growth in employment 1978–82	rank
1.	Travel	6	2,234%	20	$202	7	881%	4
2.	Real estate	8	2,161	2*	336	2	1124	2
3.	Telecommunications	17	1,580	4	68	19	1388	1
4.	Consumer goods	58	1,556	11	247	6	833	5
5.	Construction	40	1,499	14	260	4	502	13
6.	Computers & related prods.	44	1,474	6*	118	15	474	15*
7.	Insurance	10	1,468	19	267	3	657	9
8.	Finance	8	1,266	2*	129	13	594	11
9.	Consultants, finance	3	1,197	6*	257	5	461	17
10.	Apparel	16	1,159	12	126	14	949	3
11.	Medical	15	1,097	10	146	11*	500	14
12.	Data processing	33	1,075	9	78	18	705	8*
13.	Commercial equip. & supplies	22	986	16	147	10	397	18
14.	Petroleum industry	8	977	15	526	1	647	10
15.	Cable TV	6	972	1	146	11*	474	15*
16.	Consultants	19	888	7	102	17	740	6
17.	Transportation	27	858	17	174	8	508	12
18.	Building & maintenance	15	833	3	53	21	470	16
19.	Food	21	809	8	109	16	705	8*
20.	Publication & communication	35	799	5	162	9	344	20
21.	Industrial equip. & supplies	63	773	13	131	12	394	19
22.	Consultants, computer	5	697	18	60	20	732	7

*tie

THE INC. 500 INDEX (company and rank)

500

A. J. Reynolds (228)
ACE Equipment Rentals (320)
ACSIS (249)
Action Packets (92)
Ad-Tek Engineering Services (362)
Administrative Information Systems(243)
Advanced Mfg. & Development(426)
Advanced System Applications (297)
Advanced Technology (176)
Advantage Distributing (16)
Alamo Consulting Group (111)
Alimar et Cie (225)
All American Turf Beauty (323)
Allegro Services (236)
Allen-Corporation of America (368)
Allied Broadcast Equipment (449)
Aloe Charm (460)
Altus (328)
American Agrisurance (167)
American Business Lists (373)
American Intl. Insurance Agency (350)
American Marketing Services (383)
American Medical Therapeutics (404)
American Office Equipment (262)
American Passage Marketing (152)
American Technical Services Group (221)
Amex Systems (325)
Amigo Sales (428)
Anadex (454)
Anaheim Custom Extruders (437)
Anderson Industries (160)
Apam (64)
Apoca Industries (11)
Aquidneck Data (351)
Ashcraft Trucking (200)
Associated Packaging (137)
Attridge Heating and Cooling (237)
Audio Command Systems (170)
Auto Line Manufacturing (103)
Automation Electronics (338)
Avanti Communications (431)
B. W. Levy Security Consultants (100)
BMC (497)
Banik Earnings (188)
Berger Metal Fabrication (486)
Best Choice (260)
Betac (233)
Bio-Analytics (242)
Blue Dolphin Enterprises (93)
Bomark Group (379)
Booth Organization (488)
Boutique . . .Caprice (476)
Brad Cable Electronics (140)
Brady Marketing (138)
Branson Aircraft (195)
Brougher International (46)
Brun-O-Matic (453)
Burdick's Computer Stores (14)
Business Planning Associates (332)
C. M. Mascolo (150)
CEM (60)
CTEC (171)
California Labels (440)
Cameo Fashions Accessories (343)
Campmor (91)
Central Mass Media (139)
Century Data Systems (436)
Cheese & Specialty Foods (335)
Cherokee of California (443)
Chioke International (317)
Church Insurance Consultants (59)
Clock Stoppers (241)
Collier-Jackson (450)
Columbia Data Products (119)
ComDesign (55)
Comark (42)
Command Plastic (471)
Commercial & Industrial Admin. (10)
Commercial Glass & Glazing (314)
Commercial Property Services (292)
Commonwealth Mortgage (68)
Commonwealth Savings (19)
Computer Maintenance (251)
Computer Methods (43)
Computer Science Press (272)
Computer Systems Research (466)
Comsearch (77)
Con-Serv (53)
Conference Management (302)
Connecticut Travel Services (458)
Conservatree Paper (341)
Contract Furnishings & Systems (356)
Cooper Consultants (230)
Cormed (204)
Cornell Computer (240)
Corpane Industries (393)
Corporate Consulting & Devel. (259)
Corlec (126)
Cosain (234)
Court (157)
Crafco (433)
Creative Management Systems (394)
Crisstad Enterprises (180)
Custom Decor (448)
Custom Feed Services (438)
Cyber Systems (376)
Cyborg Systems (309)
D & D Services (177)
D.R.I. Industries (301)
DEY Laboratories (15)
Data Electronics (156)
Data Translation (396)
Datamaxx USA (99)
Dav-El Livery Services (496)
David Boland (334)
Deerfield Communications (247)
Delphi Glass (316)
Delta Business Systems (122)
Demaco (87)
Diet Center (258)
Digital Research (9)
Dilithium Press (178)
Diversified Systems (123)
Dixie Auto Transport (295)
Dixon Group (435)
Dobson & Associates (165)
Domino's Pizza (457)
Dorman Bogdonoff (268)
Dr. Cully's Cartage (275)
Dryden (470)
Dynamic Systems (276)
E.M.D.S. (117)
EDM Precision Products (402)
Eagle Security Systems (232)
Early Winters (162)
Eastern Business Machines (412)
Edd Helms (72)
Effective Management Systems (28)
Elgem Sales & Services (284)
Elographics (299)
Empire Airways (79)
Endless Vacation International (282)
Engineered Materials (498)
Environ Enterprises (202)
Environmental Earthscapes (369)
Environmental Resources Mgt. (88)
Equitrac (50)
Essex Grain Products (207)
Euro Rep (273)
Excalibar Products (85)
Execucom Systems (90)
Executone Telecom (298)
Executone Telecommunications (245)
F. H. Chase (481)
FTZ Industries (105)
Feldman Communications (44)
Fifth Season Travel (3)
Film Technology (489)
Finals (147)
Financial Associates (181)
Flexible Packaging (340)
Flight International Group (203)
Florida Food Industries (227)
Floscan Instrument (378)
Foam Systems (399)
Forever Living Products (6)
Four Winds Rental (8)
Frontier Cooperative Herbs (78)
Furniture Consultants (36)
GNP (415)
Gator Transportation (291)
Gemini Laminating (166)
General Communications (112)
Genie Filter (274)
Geo-Centers (455)
Gorham Model Products (269)
Graham Brake & Diesel (235)
Granite Financial (344)
Graphic Technology (366)
Gravity Guidance (2)
Gulf States Mortgage (283)
HCW Oil & Gas (41)
HTC (352)
Hall Real Estate Group (110)
Handling Systems Engineering (286)
Harmony Foods (346)
Hayes Microcomputer Products (4)
Hetzel Auction Associates (40)
Heurikon (266)
Heuston Copy (342)
Hidden Villa Ranch (306)
Hill International (62)
Hillside Bedding (229)
Holiday of Orlando (411)
Horwath Electric Motors (398)
Hot Shot Delivery (33)
Houston Wire & Cable (250)
Hoyt Investment (482)
IMS International (487)
Illuminations (190)
Image Stream (107)
InSpeech (84)
Inacomp Computer Centers (38)
Indiana Records Managers (199)
Industrial Training (365)
Information Bureau (264)
Ingram Excavation (73)
Inland Associates (142)
Institute for Resource Mgt. (400)
Integral Systems (345)
International Microcircuits (293)
Interphase (201)
Intertec Components (303)
Intertrade Industries (222)
Interwest Communications (289)
Investors Management (339)
Iris Arc (281)
J. A. Cornwell (388)
JBF Associates (185)
JBM Electronics (385)
JWK International (424)
Jack Young Associates (213)
Jackalope Pottery (329)
Jeffrey North Publishers (307)
Jewell Building Systems (206)
John Nageldinger & Son (158)
Juniata Office Supplies (483)
K&B Engineering (94)
KMCO (371)
Kappler Disposables (97)
Kassouf Parking (22)
Katek (102)
Kirke-Van Orsdel (246)
Klutz Press (491)
Kolin Plumbing (465)
Komfort Koach (468)
L. J. Russo Insurance Services (265)
LaMarca (155)
Lafayette Manufacturing (485)
Landau Building (427)
Lawson Associates (310)
Lear Hunter Aviation (490)
Leichtung (358)
Lender's Service (129)
Libra Programming (484)
Link-Allen & Associates (336)
Little Barn (353)
Littlewood, Shain (86)
Livingston Office Products (333)
Los Alamos Technical Assoc. (417)
Lube 'n Go (434)
Luckwood (261)
Lufran (359)
M'BT Associates (296)
Marietta Packaging (70)
Marine Structure Applications (255)
Markatron (95)
Markdata (12)
Marketing Communications (270)
Maryland Computer (420)
Mast Realty Group (279)
McDougal, Littell (441)
Megas Manufacturing (318)
Meistergram (479)
Memphis Glove (169)
Metaltech (321)
Metier Management Systems (7)
Metro Information Services (216)
Micro-Metl (477)
Micromedia Marketing (278)
Microtech Mfg. (191)
Mid City Web (408)
Midcom (452)
Midstate Electronics (287)
Miller Oil (432)
Mini-Pak (198)
Mission Home Health (65)
Modulite (25)
Morgan Mfg. (159)
Morino Associates (374)
Moss Brown & Co. (101)
Mountain Air Delivery (256)
Munsen's Discovery Enterprises (355)
NEOPC (179)
Nady Systems (23)
National Business Communications (174)
National Health Care Affiliates (193)
Neutron Industries (106)
New England Soy Dairy (254)
Noel Joanna (133)
North American T.B.A. (319)
North American Vending (419)
North Star Computers (392)
Northern Data Systems (20)
Northern Wire & Cable (285)
Norwich Togs (370)
Nucleus (377)
Nutech (224)
O'Donnell Organization (161)
Office Systems (433)
Omega Performance (439)
One Pass (189)
Oracle (82)
Organizational Dynamics (380)
Ostarr (451)
Outlook Graphics (115)
Oxford Software (330)
P E Systems (89)
PBM Office Products (63)
PBS Computing (294)
PCI Energy Services (248)
Pacesetter Steel Service (146)
Pacific Envelope (381)
Padgett-Thompson (144)
Parker Construction (109)
Parmed Pharmaceuticals (290)
Patson's Press (447)
Paul Newman's Coney Is Restaurant (327)
Paulsel Lumber (288)
Pelican Products (211)
Perfusion Services (395)
Pertron Controls (367)
Peter Piper (131)
Petroleum Well Services (127)
Philadelphia Financial (57)
Phillips Publishing (421)
Phone Directories (444)
Photogenesis (205)
Pied Piper Industries (209)
Pillsbury Chemical & Oil (413)
Polaris Vac-Sweep (194)
Polycoat Systems (18)
Polymer Development Labs (271)
Pretty Neat Industries (407)
Prime Resources (114)
Priority One Electronics (31)
Process Technology (75)
Production Mgt. (116)
Professional Temporary Services (141)
Professional Travel (148)
Promedics Data (290)
Pronto Systems (149)
Protec Management Systems (226)
Qualimetrics (210)
Quality Home Insulation (37)
Queen Oxygen (397)
Quintron (357)
R&E Electronics (386)
R&J Corvette Parts (313)
RAIL (186)
RSR Wholesale Guns (215)
RT Cable (219)
Red Calliope & Associates (326)
Red Lion Controls (492)
Research Plastics (163)
Research, Analysis & Mgt. (401)
Resistance Technology (263)
Richardson Equipment (135)
Robbins (29)
Robelle Industries (192)
Robert Douglass Associates (500)
Robert E. Bayley Construction (405)
Ronald Hsu Construction (81)
Rosenthal Construction (300)
Ross Systems (363)
Royal Silk (21)
Royal Waterbeds (164)
Ruiz Food Products (304)
Rustman Bus (61)
S. T. Research (442)
SAS Institute (108)
SLM Instruments (403)
Sachs/Freeman Associates (348)
Sage Systems (390)
San Antonio Developers (322)
Salter Companies (429)
Saturn Electric (238)
Scipar (308)
Seaboard Electronics (52)
Seavex (478)
Seko Air Freight (244)
Seneca Balance (480)
Sentrol (74)
Setpoint (324)
Sharper Image (76)
Sigal Construction (1)
Signal Technology (223)
Signal Vision (462)
Sillerman-Morrow Broadcasting Group (13)
Sky Courier Network (187)
Skybird Publishing (361)
Skyway Freight Systems (446)
Software Results (136)
Sonaz Construction (24)
Sonic Air Courier (469)
Sound Room (69)
Source Northwest (354)
Southern Accents Magazine (331)
Spartan Paper & Office Supply (425)
Specialty Surfacing (493)
Spectrum Foods (445)
Sport Graphics (220)
St. Lucie Paper & Packaging (128)
Star Pak Solar Systems (387)
Starmark (391)
Starving Students (305)
State Machine Products (120)
Stoops Express (414)
Style Auto (27)
Summa Four (30)
Summagraphics (464)
Sun Hill Industries (175)
Sun-Flex (26)
Sundown Vitamins (48)
Sunshine Beauty Supplies (406)
Super Liquors (124)
SuperFlow (494)
Support Systems International (56)
Sybex (364)
Systec (473)
Systems Architects (347)
Systems Group (472)
Systems Strategies (277)
TABS Associates (182)
TOM Software (467)
TSR (51)
Tank Services (459)
Tarco (80)
Tarrant Service Agency (461)
Technical Ceiling Systems (459)
Technical Systems Consultants (423)
Technology Constructors (168)
Technology Transfer Institute (143)
Technology for Energy (67)
Tek Aids Industries (35)
Telco Research (218)
TeleCheck Texas (252)
Telecommunications Specialists (134)
Tessco (130)
Texas Tumbleweed (118)
Theriault's (312)
Thermal Systems (337)
Thomas J. Doty's ImageMakers (349)
Timberland (495)
Time Systems (113)
Tool King (231)
Trade West (208)
Transalaska Data Systems (172)
TravelCenter (267)
Tri-Glas Industries (66)
Trident Data Systems (58)
Triton (153)
Twincraft (154)
Tyke International (17)
Ugly Duckling Rent-A-Car System (183)
Unified Mortgage (34)
Uniq Digital Technologies (214)
United Design (197)
United Technical Products (39)
Univox California (98)
Unwin, Scheben, Korynta, Huettl (474)
Urban Electrical (360)
VDS (32)
Vanguard Groups International (54)
Vanner (132)
Viar (184)
Vie de France (372)
View Engineering (83)
Virginia Textiles (104)
Visible Changes (54)
Vital Signs (96)
Vocational Training Center (418)
W. A. Brown Instruments (456)
W-B Pump & Supply (384)
W. B. Wood (409)
Warehouse Appliance (5)
Web Printing Controls (145)
Webb, Murray & Associates (382)
Webco Press (315)
Weekley Homes (173)
Western Controls (410)
Wheeled Coach (239)
Whipps (422)
Whitehill Mfg. (125)
Wiedemann & Johnson (311)
Wier & Associates (257)
Willis (217)
Wilson Laboratories (389)
Windham (253)
Winn Galleries (416)
Winona Knitting Mills (375)
Wizard Publications (212)
Wolfberg/Alvarez/Taracido & Associates (47)
World Wide Chemicals (196)
Wornick (121)
Xentek (475)
Yankee Group (151)
ZZYZZX Technologies (49)
Zimdar Enterprises (430)
Zoom Telephonics (71)

NOTE

ONLY THE FOLLOWING PAGES OF THIS

PUBLICATION HAVE BEEN FILMED

Cov. 1, p. 2-3, 42, 44-46,

48, 50-52, 75-76, 78, 80-82.